



## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

re U.S. Patent Application :

Jay W. GRATE et al.

Application No. 09/944,816 ✓

Filed August 31, 2001

FLOW-CONTROLLED MAGNETIC  
PARTICLE MANIPULATION

Before the Examiner

Group Art Unit

January 23, 2002

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INFORMATION DISCLOSURE STATEMENT

Honorable Commissioner for Patents  
Washington, D. C. 20231

Sir:

Pursuant to the duty of disclosure embodied in 37 C.F.R. § 1.56, Applicant wishes to bring to the attention of the Examiner the items of information listed on the enclosed PTO Form PTO/SB-08A and PTO/SB-08B. This information has not been previously submitted in this application, and has not been heretofore cited by the Examiner. Copies of cited items are enclosed in accordance with 37 C.F.R. § 1.98.

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to the Honorable Commissioner for Patents, Washington, D.C. 20231 on

January 23, 2002

(Date of Deposit)

Gregory B. Coy

Name of Registered Representative

*G B Coy*

Signature

January 23, 2002

Date of Signature

INFORMATION DISCLOSURE STATEMENT

Serial No. 09/944,816

Attorney Docket No. 50005-50

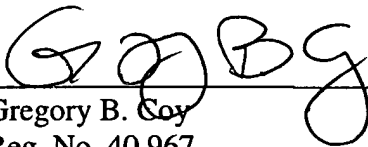
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The filing of this Information Disclosure Statement shall not be construed as an admission that the information cited is, or is considered to be, material to patentability as defined in § 1.56(b).

This Statement is being submitted prior to the mailing of any Office Action on the merits. It is believed that no fee is required for consideration of the submitted items. Should any fee be required, however, please charge such fee to Deposit Account No. 23-3030, but not to include any payment of issue fees.

Respectfully submitted:

By



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**SUPPLEMENTAL INFORMATION  
DISCLOSURE STATEMENT**

(use as many sheets as necessary)

Sheet 1 of 3

**Complete if Known**

Application Number	09/944,816
Filing Date	August 31, 2001
First Named Inventor	Jay W. Grate
Group Art Unit	
Examiner Name	
Attorney Docket Number	50005-50

**U.S. PATENT DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	Document Number Number-Kind Code <sup>2</sup> (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines where Relevant Passages or Relevant Figures Appear
		4,190,524	02/26/1980	Watson	
		4,208,277	06/17/1980	Lofthouse et al.	
		4,352,730	10/05/1982	Dijkhuis	
		4,375,407	03/01/1983	Kronick	
		4,664,796	05/12/1987	Graham et al.	
		5,106,491	04/21/1992	Schulze et al.	
		5,108,933	04/28/1992	Liberti et al.	
		5,128,043	07/07/1992	Wildermuth	
		5,200,084	04/06/1993	Liberti et al.	
		5,385,707	01/31/1995	Miltenyi et al.	
		5,405,752	04/11/1995	Nilsson	
		5,411,863	05/02/1995	Miltenyi	
		5,468,616	11/21/1995	Coulter et al.	
		5,541,072	07/30/1996	Wang et al.	
		5,543,289	08/06/1996	Miltenyli	
		5,567,326	10/22/1996	Ekenberg et al.	
		5,601,988	02/11/1997	Gordon	
		5,616,250	04/01/1997	Johnson et al.	

Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document Country Code <sup>3</sup> -Number <sup>4</sup> -Kind Code <sup>5</sup> (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T <sup>6</sup>
		GB 2,015,900	09/19/1979			
		EP 0,318,913	06/07/1989			
		WO 00/25128	05/04/2000			
		WO 00/50175	08/31/2000			

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		5,622,831	04/22/1997	Liberti et al.	
		5,681,478	10/28/1997	Lea et al.	
		5,693,539	12/02/1997	Miltenyi et al.	
		5,698,271	12/16/1997	Liberti et al.	
		5,702,950	12/30/1997	Tajima	
		5,711,871	01/27/1998	Miltenyi	
		5,728,303	03/17/1998	Johnson	
		5,814,468	09/29/1998	Siiman et al.	
		5,876,593	03/02/1999	Liberti et al.	
		5,922,284	07/13/1999	Kinoshita et al.	
		5,925,573	07/20/1999	Colin et al.	
		5,972,721	10/26/1999	Bruno et al.	
		5,993,740	11/30/1999	Niiyama et al.	
		6,020,210	02/01/2000	Miltenyi	
		6,143,577	11/07/2000	Bisconte Sconte De Saint Julien	
		6,159,378	12/12/2000	Holman et al.	
		6,174,667	01/16/2001	Huchzermeier et al.	
		6,258,607	07/10/2001	Saito et al.	
		2001/0008217	07/19/2001	Watkins et al.	

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Group Art Unit	
Examiner Name	
Attorney Docket Number	50005-50

**OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s) publisher city and/or country where published	T <sup>2</sup>
		Egorov O and Ruzicka J; <u>Flow Injection Renewable Fibre Optic Sensor System. Principle and Validation on Spectrophotometry of Chromium (VI)</u> , Analyst, Vol. 120, July 1995, pgs. 1959-1962.	
		Grate JW, Strebin R, Janata J; <u>Automated Analysis of Radionuclides in Nuclear Waste: Rapid Determination of <sup>90</sup>Sr by Sequential Injection Analysis</u> ; Analytical Chemistry, Vol. 68, No. 2, January 15, 1996, pgs. 333-340.	
		Holman DA, Christian GD, Ruzicka J; <u>Titration without Mixing or Dilution: Sequential Injection of Chemical Sensing Membranes</u> ; Analytical Chemistry, Vol. 69, No. 9, May 1997, pgs. 1763-1765.	
		Mayer M and Ruzicka J; <u>Flow Injection Based Renewable Electrochemical Sensor System</u> ; Analytical Chemistry, Vol. 68, No. 21, November 1, 1996, pgs. 3808-3814.	
		Pollema, CH and Ruzicka J; <u>Flow Injection Renewable Surface Immunoassay: A New Approach to Immunoanalysis with Fluorescence Detection</u> ; Analytical Chemistry, Vol. 66, No. 11, June 1, 1994, pgs. 1825-1831.	
		Pollema CH, Ruzicka J, and Christian GC; <u>Sequential Injection Immunoassay Utilizing Immunomagnetic Beads</u> ; Analytical Chemistry, Vol. 64, No. 13, July 1, 1992, pgs. 1356-1361.	
		Ruzicka J, Pollema CH, and Scudder KM; <u>Jet ring Cell: A Tool for Flow Injection Spectroscopy and Microscopy on a Renewable Solid Support</u> ; University of Washington, October 7, 1993.	
		Ruzicka, J; <u>Discovering Flow Injection: Journey From Sample to a Live Cell and From Solution to Suspension</u> ; Analyst, Vol. 119, September 1994, pgs. 1925-1934.	
		Ruzicka J and Ivaska A; <u>Biologand Interaction Assay by Flow Injection Absorptiometry</u> ; Analytical Chemistry, Vol. 69, No. 24, December 15, 1997, pgs. 5024-5030.	
		Solé, S, Alegret S, Céspedes F, and Fàbregas E; <u>Flow Injection Immunoanalysis Based on a Magnetoimmunosensor System</u> ; Analytical Chemistry, Vol. 70, No. 8, April 15, 1998, pgs. 1462-1467.	
		Willumsen B, Christian GD, and Ruzicka J; <u>Flow Injection Renewable Surface Immunoassay for Real Time Monitoring of Biospecific Interactions</u> ; Analytical Chemistry, Vol. 69, No. 17, September 1, 1997, pgs. 3482-3489.	
		Radbruch, Andreas; <u>Cell Separation Methods and Applications</u> ; Marcel Dekker, Inc, New York, pages 192-195, pgs. 192-195.	

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